

## INTERPOLATING PROGRAMMABLE GAIN ATTENUATOR

### ABSTRACT OF THE DISCLOSURE

A programmable gain attenuator includes a termination resistor. A first termination switch connects one side of the termination resistor to a first output. A second termination switch connects another side of the termination resistor to a second output. A first resistor ladder is arranged between a first input and the first side of the termination resistor. A first plurality of switches connect a corresponding tap from the first resistor ladder to the first output. A second resistor ladder is arranged between a second input and the second side of the termination resistor. A second plurality of switches connect a corresponding tap from the second resistor ladder to the second output. A first switch of the first plurality of switches is turned on, followed by a second switch of first plurality of switches turned off, followed by a third switch of first plurality of switches turned on. A first switch of the second plurality of switches is turned on, followed by a second switch of second plurality of switches turned off, followed by a third switch of second plurality of switches turned on.